## PATENT COOPERATION TREATY

# **PCT**

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Artcle 36 and Rule 70)

| Applicant's or agent's file reference SH-20071-PCT  | FOR FURTHER ACT  | ION                      | See Form PCT/IPEA/4                             | 416                |  |  |  |
|---|--|--------------------------|---|--------------------|--|--|--|
| International application No.   | International filing date/di                                 | len/month/years          | Designative data (day/www.k                     |                    |  |  |  |
| DCT/IZD2004/001/00  |  | •                        | Priority date (day/month) 15 JULY 2003 (15.07.2 | • •                |  |  |  |
|   | or national classification a                                 |                          | 133021 2003 (13.07.2                            | .003)              |  |  |  |
| International Patent Classification (IPC) or national classification and IPC  IPC7 G11B 7/085   |  |                          |   |                    |  |  |  |
| Applicant   |  |                          |   |                    |  |  |  |
| SAMSUNG ELECTRONICS CO., LTD. et al   |  |                          |   |                    |  |  |  |
| This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.   |  |                          |   |                    |  |  |  |
| 2. This REPORT consists of a total of   | fsheets.   | including this cover sh  | eet.  |                    |  |  |  |
| This report is also accompanied by ANNEXES, comprising:   |  |                          |   |                    |  |  |  |
| a. (sent to the applicant and to the International Bureau) a total ofsheets. as follows:  |  |                          |   |                    |  |  |  |
| sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). |  |                          |   |                    |  |  |  |
| sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes  |  |                          |   |                    |  |  |  |
| beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.  |  |                          |   |                    |  |  |  |
| b. (sent to the International   | Bureau only) a total of (inc                                 | dicate type and number   | of electronic carrier(s))                       |                    |  |  |  |
| containing a sequence lis   | ting and/or tables related th<br>ig to Sequence Listing (see | nereto, in computer read | dable form only, as indicat                     | ed in the          |  |  |  |
| Supplemental Box relati   | E to Sequence Eisting (see                                   | Section 802 of the Adi   | ministrative instructions).                     |                    |  |  |  |
| 4. This report contains indications relating to the following items:  |  |                          |   |                    |  |  |  |
| Box No. 1 Basis of the  | _  |                          |   |                    |  |  |  |
| Box No. II Priority   |  |                          |   |                    |  |  |  |
| Box No. III Non-establis  | hment of opinion with rega                                   | ard to novelty, inventiv | e step and industrial applic                    | cability           |  |  |  |
| Box No. IV Lack of unit   | y of invention   |                          |   |                    |  |  |  |
| Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement   |  |                          |   |                    |  |  |  |
| Box No. VI Certain documents cited  |  |                          |   |                    |  |  |  |
| Box No. VII Certain defects in the international application  |  |                          |   |                    |  |  |  |
| Box No. VIII Certain observations on the international application  |  |                          |   |                    |  |  |  |
| Date of submission of the demand  |  | Date of completion of t  | this report                                     |                    |  |  |  |
|   |  | •                        |   |                    |  |  |  |
| 01 FEBRUARY 2005  | (01.02.2005)   | 22 NOVEMB                | ER 2005 (22.11.2005)                            |                    |  |  |  |
| Name and mailing address of the IPEA/k  | R  | Authorized officer       |   | para series years. |  |  |  |
| Korean Intellectual Property<br>920 Dunsan-dong, Seo-gu, I<br>Republic of Korea   | Office   | SONG, Jin Suk            |   | A BITT             |  |  |  |
| Facsimile No. 82-42-472-7140  |  | Telephone No. 82-42-     | -481-5694                                       | FR   Paral Paral   |  |  |  |

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/KR2004/001696

| Bo  | x No.  | o. I Basis of the report  |  |  |  |  |  |
|-----|--|---|--|--|--|--|--|
| 1.  | 1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.  This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of:  international search (under Rules 12.3 and 23.1(b))  publication of the international application (under Rule 12.4)  international preliminary examination (under Rules 55.2 and/or 55.3) |   |  |  |  |  |  |
| 2.  | With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this reort as "originally filed" and are not annexed to this reports:  the international application as originally filed/furnished  |   |  |  |  |  |  |
|     |  | the description:  |  |  |  |  |  |
| l   |  | pages   | as originally filed/furnished                            |  |  |  |  |
| ĺ   |  |   | ed by this Authority on                                  |  |  |  |  |
|     |  | pages*receive   | ed by this Authority on                                  |  |  |  |  |
|     |  | the claims:   |  |  |  |  |  |
|     | _  | pages   | as originally filed/furnished                            |  |  |  |  |
|     |  | pages*  | as amended (together with any statment) under Article 19 |  |  |  |  |
|     |  | pages* receive  | ed by this Authority on                                  |  |  |  |  |
|     |  | pages* receive  | ed by this Authority on                                  |  |  |  |  |
|     |  | the drawings:   |  |  |  |  |  |
|     |  | pages   | as originally filed/furnished                            |  |  |  |  |
|     |  | pages*receive   |  |  |  |  |  |
|     |  | pages*receive   | ed by this Authority on                                  |  |  |  |  |
| 3.  |  | the sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.  The amendments have resulted in the cancellation of:  the description, pages the claims, Nos. the drawings. sheets the sequence listing (specify): any table(s) related to sequence listing (specify):  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made. since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)). the description, pages the claims, Nos. the drawings, sheets the sequence listing (specify): any table(s) related to sequence listing (specify): |  |  |  |  |  |
| * ! | lf item  | em 4 applies, some or all of those sheets may be marked "super  | seded."  |  |  |  |  |

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. : PCT/KR2004/001696\*\*

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

| 1. Statement                  |        |     | 2   |  |
|-------------------------------|--------|-----|-----|--|
| Novelty (N)                   | Claims | 1-5 | YES |  |
|                               | Claims |     | NO  |  |
| Inventive step (IS)           | Claims | 1-5 | YES |  |
|                               | Claims |     | NO  |  |
| Industrial applicability (IA) | Claims | 1-5 | YES |  |
|                               | Claims |     | NO  |  |

2. Citations and explanations (Rule 70.7)

Reference is made to the following documents:

D1: JP 05-325210 (PIONEER ELECTRONIC CORP) 10 Dec. 1993

D2: US 5297131A (SONY CORP.)22 MARCHJ 1994

#### 1. Novelty and Inventive Step

The subject matter of claims 1-5 of the present invention is a track jump apparatus and method which perform track jumping in consideration of the position of a pickup and the position of a lens of the pickup in an optical recording medium and system with eccentricity are provided.

D1and D2is the most relevant state of the arts of the present inventions.

D1 discloses a method of performing a stable jump without being affected by the eccentricity of an optical disk by varying either one of the time width or the wave height value of a brake pulse in accordance with the time till a zero crossing of tracking error signals which correspond to the amount of the disk eccentricity.

D2 discloses a eccentricenricy detection and compensation of a dsk by a preformatted encoding pattern. An area for recording preformatted is provided on a rewritable disk in order to obtain information of an eccentricity provided when the disk is chuckled.

However D1 does not inclde servo which judges a position of he pickup from the error signal output from RF processing unit when a track jump is performed and outputs a track jump start/end control signal for the pickup, which gives clear indication of an improvement on a track access control system.

Therefore, the subject matter of the claim 1-5 of the present invention seems to be novel, and cannot be considered of combination oventive step(PCT Article 33(2)-(3)).

### 2. Industrial Applicability

Claims 1-5 of the present invention meet the criteria set out in PCT Article 33(4) because they are directed to a track jump apparatus and method in an optical recording medium and system. Therefore, the subject matter of claims 1-5 is considered to be industrially applicable.